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CENTER FOR EDUCATION STATISTICS

Targeted Forecast

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Public Elementary Enrollment Continues to Increase While Public Secondary Enrollment Decreases This Fall

1988 Public Elementary and Secondary Enrollments

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The Center for Education Statistics (CES) projects that this fall (1988), nearly 100,000 more students will enroll in public elementary and secondary schools than last year. This number is expected to increase from 40.2 million in 1987 to 40.3 million in 1988.

Public school enrollment in kindergarten (K) through grade 8 is expected to increase 1.6 percent from 28.0 million in 1987 to 28.4 million in 1988.

In contrast, public school enrollment in grades 9-12 will register a decline of 3.1 percent (from 12.2 million to 11.8 million) over the same period. This enrollment decrease is expected to occur despite a concurrent increase in graduates. This is because decreases in grades 9-11 will be larger than the increase in 12th-grade enrollment.

5-Year Outlook

In the next 5 years (1988 through 1992), total fall enrollment in public elementary and secondary schools is projected to rise from 40.3 million in 1988 to 41.9 million in 1992, an increase of 4.0 percent. This increase is a continuation of the rise in total public school enrollment that began in 1985.

Public school enrollment in grades K-8 is expected to increase 6.1 percent, from 28.4 million in 1988 to 30.2 million in 1992. This growth reflects increases in the size of the 5- to 13-year-old population.

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In contrast, ~~public enrollment in grades 9-12 is projected to decrease from 11.8 million in 1988 to 11.4 million in 1990. This trend will reverse in 1991 and climb to 11.7 million in 1992. This pattern tends to reflect changes in the 14- to 17-year-old population.~~

**U.S. Department of Education
Office of Educational Research and Improvement**

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Forecast

Public school enrollments, by grade level, with forecasts: Fall 1986 to 1992

(In thousands)

	Grade level			
	Year	K-12	K-8	9-12
Actual	1986	39,837	27,404	12,434
Estimate	1987	40,200	27,983	12,217
Forecast	1988	40,280	28,439	11,841
	1989	40,337	28,807	11,530
	1990	40,752	29,366	11,386
	1991	41,306	29,794	11,512
	1992	41,879	30,178	11,701

NOTE 1.—These forecasts were prepared October 1987.

NOTE 2.—Because of rounding, details may not add to totals.

Technical Notes

Methodology

Projections of enrollment in public elementary and secondary grades 2 through 12 are based on a grade retention method. This method starts with 6-year-olds entering first grade and follows their subsequent progress through public elementary and secondary schools. This method assumes that past trends in factors affecting enrollments will continue over the projection period. The method implicitly includes the net effect of such variables as immigration, dropouts, transfers to and from private schools, and deaths. Kindergarten, first grade, elementary ungraded and special, secondary ungraded and special, and postgraduate enrollments are projected on the basis of enrollment rates using populations of 5-, 6-, 5-13-, 14-17-, and 18-year-olds as the bases.

Both public grade retention rates and public enrollment rates by age are projected to remain constant at levels consistent with most recent rates.

These enrollment forecasts are demographically based. CES chose to use Bureau of the Census middle series population projections. The middle series (series 14) projections assume an ultimate completed cohort fertility rate of 1.8 births per woman by the year 2050 and a net annual immigration of 600,000 through 1988. Then net annual immigration decreases 10,000 every year to 500,000 by 1998 and remains constant thereafter.

These forecasts were calculated before the CES early estimate for 1987 was available.

Percentage changes were calculated using unrounded numbers.

For further details on the methods used to develop these forecasts, see *Projections of Education Statistics to 1997-98*, forthcoming.

Forecast Accuracy

The mean absolute percentage error (MAPE) was used to measure forecast accuracy. An analysis of projection errors (differences between actual and projected numbers) from the past 14 editions of *Projections of Education Statistics* indicates that MAPEs for total enrollment in public elementary and secondary schools were 0.2 percent for 1 year ahead, 0.4 percent for 2 years ahead, and 0.8 percent for 5 years ahead. For the 1-year-ahead prediction, this means that one would expect the forecast to be within 0.2 percent of the actual value, on the average. For projections of public enrollment in grades K through 8, the MAPEs were 0.3 for 1 year ahead, 0.6 for 2 years ahead, and 0.9 percent for 5 years ahead. MAPEs for public enrollment in grades 9 through 12 were 0.6, 0.8, and 2.0 percent, respectively.

Sources of Data

The enrollment data used in these forecasts were obtained from the "Common Core of Data" survey conducted by the U.S. Department of Education, Center for Education Statistics. Population data were obtained from *Current Population Reports* (Series P-25), "Estimates of the Population of the United States" and unpublished tabulations by the U.S. Department of Commerce, Bureau of the Census. No comparable time series of this type exists for private schools; thus, forecasts of private school enrollment could not be developed. CES is conducting a survey of private schools, which should yield, in a couple of years, the data needed to calculate forecasts of private school enrollment.

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Public school enrollment, by grade level, compared with school - age populations: Fall 1972 to 1992

(Enrollment and population, in millions)

